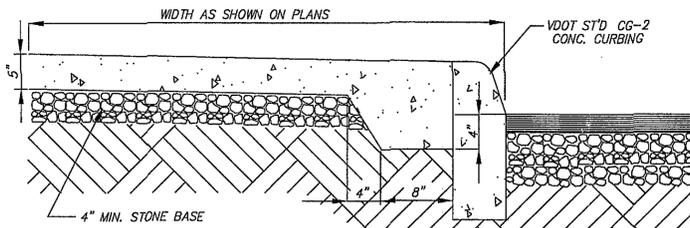
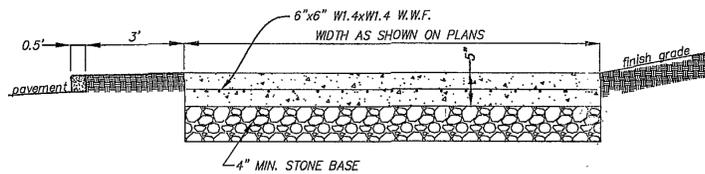


(A) HEAVY-DUTY PORTLAND CEMENT CONCRETE PAVEMENT
C-6 NO SCALE

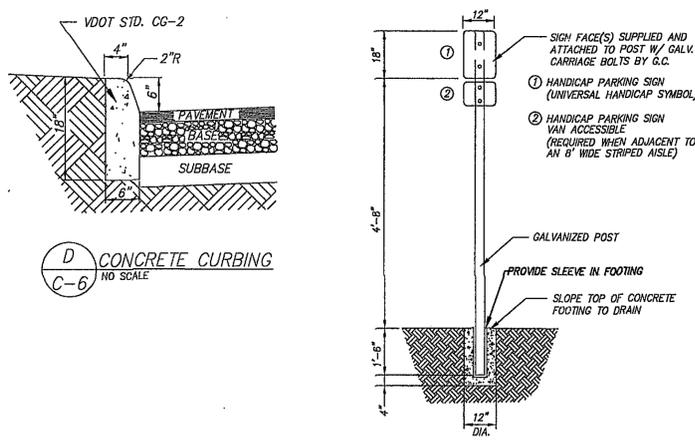


NEW CONCRETE SIDEWALK MAY BE POURED SEPARATELY FROM NEW CONCRETE CURBING (OR CURB AND GUTTER), OR MAY BE POURED MONOLITHICALLY, AT THE CONTRACTOR'S DISCRETION. IF POURED SEPARATELY, A PRE-MOLDED EXPANSION JOINT SHALL BE PLACED BETWEEN THE SIDEWALK AND THE CURBING. THIS EXPANSION JOINT SHALL EXTEND THE FULL DEPTH OF THE SIDEWALK.

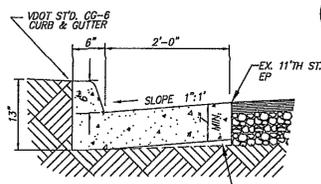
(B) CONCRETE SIDEWALK
C-6 NO SCALE



(C) CONCRETE SIDEWALK
C-6 NO SCALE



(E) POST-MOUNTED SIGN
C-6 NO SCALE



(F) CG-6-CONCRETE CURB AND GUTTER
C-6

SOIL EROSION CONTROL NARRATIVE

PROJECT DESCRIPTION: THE PURPOSE OF THIS PROJECT IS THE CONSTRUCTION OF A NEW FIRE STATION ON A 1.04 ACRE PARCEL AT THE NORTHEAST CORNER OF WILLIAMSON ROAD AND BIRCHLAWN AVE. NW

EXISTING SITE CONDITIONS: THE EXISTING SITE IS APPROXIMATELY 70% WOODED WITH THE REMAINING PORTION BEING IN ESTABLISHED GRASS. THE MAJORITY OF THE SITE IS APPROXIMATELY FIVE (5) FEET BELOW THE EDGE OF PAVEMENT OF WILLIAMSON ROAD. DRAINAGE PATTERNS ON THE SITE ARE SUCH THAT THE EASTERN AND SOUTHERN PORTION OF THE SITE DRAIN TO A CURB INLET IN A SUMP ALONG BIRCHLAWN AVE. THE SLOPED WESTERN PORTION OF THE SITE DRAINS TO AN EXISTING LOW AREA WHICH PREVENTS THIS WATER FROM LEAVING THE SITE.

ADJACENT PROPERTY: THE SITE IS BOUNDED ON THE WEST BY WILLIAMSON ROAD, ON THE NORTH BY PROPERTY OWNED BY THIRTY THREE EAST, INC., JI QUI & MEI YU XIAO, AND AFFORDABLE EFFICIENCY INNS, INC. THE PROPERTY IS BOUNDED TO THE EAST BY LANFORD STREET N.W. AND TO THE SOUTH BY BIRCHLAWN AVE.

CRITICAL AREAS: THE PRIMARY LOCATION FOR POSSIBLE RUNOFF WILL BE TO THE EXISTING CURB INLET IN BIRCHLAWN AVE. EROSION CONTROL MEASURES ARE SPECIFIED WHICH ARE INTENDED TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THIS INLET. THE CONTRACTOR WILL UTILIZE THE CONSTRUCTION ENTRANCE SPECIFIED ON THE PLANS. FILL MATERIAL WILL NEED TO BE BROUGHT ONTO THE SITE TO REACH PROPOSED GRADES.

OFF-SITE AREAS: THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING FILL MATERIAL FROM AN OFF-SITE BORROW AREA. **IT IS THE CONTRACTORS EXPRESS RESPONSIBILITY TO OBTAIN AN EROSION AND SEDIMENT CONTROL PERMIT, FROM THE APPROPRIATE APPROVING AUTHORITY, FOR ANY OFF-SITE BORROW AREAS TO BE UTILIZED FOR THIS PROJECT.

SOILS: THE SOILS MATERIAL AS IDENTIFIED BY THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE, GENERAL SOIL MAP AS 'URBAN LAND'. URBAN LAND HAS A VARIABLE RUNOFF POTENTIAL DUE TO HIGHLY VARIABLE SOIL TYPES AND CONDITIONS IN THESE AREAS.

EROSION AND SEDIMENT CONTROL MEASURES:

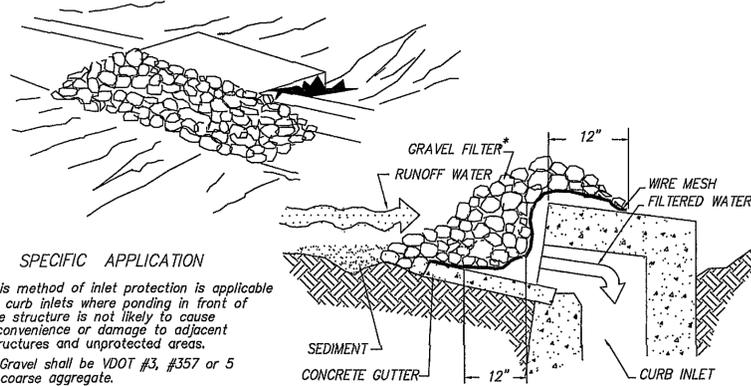
UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK", THIRD EDITION.

- PRIOR TO ANY WORK BEING PERFORMED ON THE PROPOSED PROJECT, A TEMPORARY CONSTRUCTION ENTRANCE SHALL BE PROVIDED TO THE SITE. THE ENTRANCE SHALL BE COMPOSED OF GRADED 3" STONE TO A MINIMUM DEPTH OF 6". THE ENTRANCE SHALL ALSO RUN FOR A MINIMUM DISTANCE OF NOT LESS THAN 70' FROM THE EXISTING PAVEMENT EDGE. THE ENTRANCE SHALL BE CONTINUALLY MAINTAINED, INSPECTED, REPAIRED, OR OTHERWISE BE KEPT IN GOOD FUNCTIONAL CONDITION THROUGHOUT THE EXTENT OF THE WORK ON SITE.
- REGARDLESS OF FUTURE DEVELOPMENT PLANS, THE CONTRACTOR SHALL IMMEDIATELY INSTALL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE PLANS.
- AFTER THE CONTROL DEVICES ARE FOUND TO BE FUNCTIONAL, THE CONTRACTOR SHALL IMMEDIATELY PROCEED WITH GRUBBING AND FILL PLACEMENT. DENUDED AREAS INDICATED ON THESE PLANS TO RECEIVE PERMANENT SEEDING SHALL BE SEEDED WITHIN SEVEN (7) DAYS AFTER FINAL GRADING, AND SHALL BE IN STRICT ACCORDANCE WITH THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK", THIRD EDITION.
- IN GENERAL, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL. IN PARTICULAR:
 - THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION TO PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY.
 - ALL SILT FENCE BARRIERS AND INLET PROTECTIONS SHALL BE CHECKED REGULARLY FOR UNDERMINING AND SEDIMENT BUILDUP.
 - ALL SEEDED AREAS WILL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHALL BE FERTILIZED AND RESEEDED AS NEEDED.

STORM WATER RUNOFF: A BIOTENTION BASIN POROUS CONCRETE PAVEMENT AND A RAINWATER HARVESTING SYSTEM ARE ALL PROPOSED FOR THIS SITE WHICH WILL REDUCE THE OVERALL POST-DEVELOPED FLOWS TO PRE-EXISTING CONDITIONS OR LESS AS WELL AS PROVIDE A REDUCTION IN THE TOTAL PHOSPHOROUS LOAD EXITING THE SITE.

GENERAL COMMENTS:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES.
- NO WORK SHALL PROCEED ON SITE UNTIL THE PROPER AUTHORIZATION OR PERMIT HAS BEEN OBTAINED FROM THE CITY OF ROANOKE.
- CALDWELL WHITE ASSOCIATES DOES NOT GUARANTEE THE COMPLETION OR QUALITY OF PERFORMANCE OF THE CONTRACTS BY CONTRACTORS OR OTHER THIRD PARTIES.



SPECIFIC APPLICATION

This method of inlet protection is applicable of curb inlets where ponding in front of the structure is not likely to cause inconvenience or damage to adjacent structures and unprotected areas.

* Gravel shall be VDOT #3, #357 or 5 coarse aggregate.

(IP) GRAVEL CURB INLET SEDIMENT FILTER

(PS) PERMANENT SEEDING MIXTURE

DISTURBED AREAS SHALL BE PERMANENTLY SEEDING WITHIN SEVEN (7) DAYS OF ACHIEVING FINAL GRADE, OR ON DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE WITHIN ONE YEAR.

TYPE A

03/15 TO 05/15 OR 08/16 TO 10/31
ANNUAL RYEGRASS @ 20 LB / ACRE
RED TOP @ 2 LB / ACRE
KY 31 FESCUE @ 150 LB / ACRE

05/16 TO 08/15
FOXTAIL MILLET @ 20 LB / ACRE
ANNUAL RYEGRASS @ 20 LB / ACRE
KY 31 FESCUE @ 150 LB / ACRE

11/01 TO 02/28
WINTER RYE @ 20 LB / ACRE
RED TOP @ 20 LB / ACRE
KY 31 FESCUE @ 150 LB / ACRE

TYPE B (SLOPES 3:1 OR STEEPER)

03/15 TO 05/15 OR 08/16 TO 10/31
CROWN VETCH @ 20 LB / ACRE
ANNUAL RYEGRASS @ 20 LB / ACRE
RED TOP @ 20 LB / ACRE
KY 31 FESCUE @ 108 LB / ACRE

05/16 TO 08/15
CROWN VETCH @ 20 LB / ACRE
FOXTAIL MILLET @ 20 LB / ACRE
ANNUAL RYEGRASS @ 20 LB / ACRE
KY 31 FESCUE @ 108 LB / ACRE

11/01 TO 02/28
CROWN VETCH @ 20 LB / ACRE
WINTER RYE @ 20 LB / ACRE
RED TOP @ 20 LB / ACRE
KY 31 FESCUE @ 108 LB / ACRE

LIME 4,000 LB / ACRE PULVERIZED AGRICULTURAL LIMESTONE
FERTILIZER 10-20-10 @ 1,000 LB / ACRE
MULCH SHALL BE USED OVER ALL SEEDED AREAS AND SHALL BE APPLIED IN STRICT ACCORDANCE WITH STANDARD AND SPECIFICATION 3.35 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION

SOIL CONDITIONING: INCORPORATION OF LIME AND FERTILIZER, SELECTION OF CERTIFIED SEED, MULCHING, MAINTENANCE OF NEW SEEDINGS, AND RESEEDING SHALL BE IN ACCORDANCE WITH SPECIFICATIONS CONTAINED WITHIN THE VIRGINIA SOIL EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION. ADDITIONAL SEEDING TO BE PERFORMED AS REQUIRED BY THE CITY ENGINEER.
SEED APPLICATION: APPLY SEED UNIFORMLY WITH A CYCLOPE SEEDER, DRILL, MULTIPACKER SEEDER, OR HYDROSEEDER ON A FIRM, FRAGILE, SEEDBED. MAXIMUM SEEDING DEPTH SHALL BE 1/4 INCH.

(TS) TEMPORARY SEEDING

DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR A PERIOD OF MORE THAN 30 DAYS SHALL BE STABILIZED WITH TEMPORARY SEEDING MEASURES AS SHOWN HEREIN, AND AS FURTHER DETAILED AS STANDARD AND SPECIFICATION 3.31 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION. IN ADDITION TO AREAS OF GENERAL GRADING THAT WILL NOT BE FINE-GRADED FOR GREATER THAN 30 DAYS, THE FOLLOWING SPECIFIC EAS MEASURES SHALL BE STABILIZED WITH TEMPORARY SEEDING IMMEDIATELY UPON COMPLETION OF CONSTRUCTION OF THE TEMPORARY MEASURE:

- SOIL STOCKPILES
- DIKES, DAMS, AND SIDES OF SEDIMENT BASINS
- TEMPORARY ROADWAY EMBANKMENTS

PRIOR TO SEEDING, INSTALL NECESSARY EROSION CONTROL PRACTICES SUCH AS DIKES, WATERWAYS, AND BASINS. PROVIDE PLANTS AS SPECIFIED HEREIN, OR ENGINEER-APPROVED EQUAL.

SEEDING PREPARATION: LIME SHALL BE APPLIED IF DISTURBED AREAS WILL REMAIN DORMANT BETWEEN 30 DAYS AND 120 DAYS. IF REQUIRED, LIME SHALL BE APPLIED AS SHOWN, BASED ON SOIL ACIDITY.

pH	APPLICATION OF AGRICULTURAL LIMESTONE
BELOW 4.2	3 TONS PER ACRE
4.2 TO 5.2	2 TONS PER ACRE
5.2 TO 6.0	1 TON PER ACRE
ABOVE 6.0	LIME NOT REQUIRED

FERTILIZER: SHALL BE APPLIED AS 800 LBS/ACRE OF 10-20-10 OR EQUIVALENT NUTRIENTS. LIME (AS APPLICABLE) AND FERTILIZER SHALL BE INCORPORATED INTO THE TOP 2 TO 4 INCHES OF SOIL, IF POSSIBLE.

SURFACE ROUGHENING: SHALL BE REQUIRED WHERE AREAS TO BE SEEDING HAVE BEEN COMPACTED, CRUSTED, OR HARDENED BY CONSTRUCTION TRAFFIC. AS REQUIRED, SEEDINGS SHALL BE ROUGHENED IN ACCORDANCE WITH STANDARD AND SPECIFICATION 3.29 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. (TRACKING WITH BULLDOZER CLEATS SHALL BE USED IN SANDY SOILS)

SEEDING: SEED SHALL BE EVENLY APPLIED WITH THE SAME MEANS SPECIFIED HEREIN FOR PERMANENT SEEDING. SMALL GRAINS SHALL BE PLANTED NO MORE THAN ONE INCH DEEP. GRASSES AND LEGUMES SHALL BE PLANTED WITH NO LESS THAN 1/4" OF SOIL COVER.

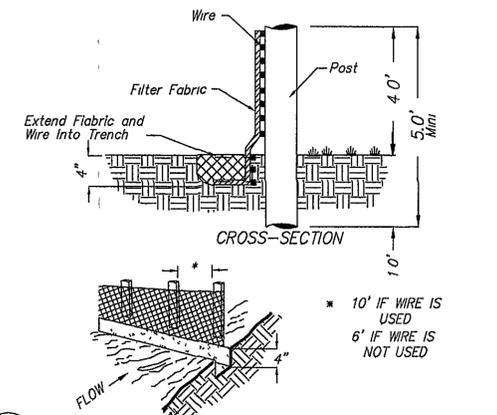
MULCHING: SEEDINGS MADE IN FALL FOR WINTER COVER AND DURING HOT AND DRY SUMMER MONTHS SHALL BE MULCHED ACCORDING TO STANDARD AND SPECIFICATION 3.35 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, EXCEPT THAT FIBER MULCH MAY NOT BE USED. STRAW MULCH SHALL BE USED DURING THESE PERIODS.

TEMPORARY SEEDINGS MADE UNDER FAVORABLE SOIL AND SITE CONDITIONS DURING OPTIMUM SPRING AND FALL SEEDING DATES MAY NOT REQUIRE MULCH.

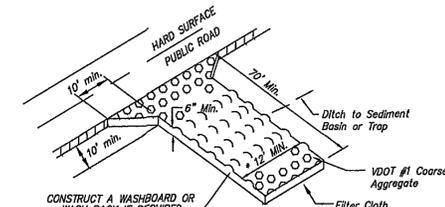
RE-SEEDING: AREAS WHICH FAIL TO ESTABLISH VEGETATIVE COVER ADEQUATE TO PREVENT RILL EROSION SHALL BE RE-SEEDING AS SOON AS SUCH AREAS ARE IDENTIFIED.

ACCEPTABLE TEMPORARY SEEDING PLANT MATERIALS BY RANGE OF PLANTING DATES:

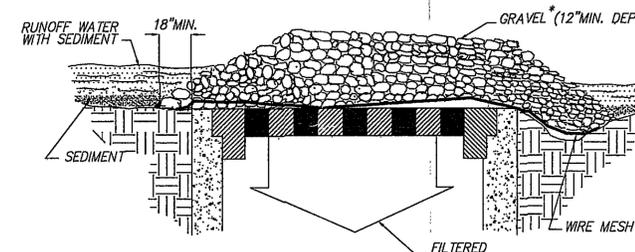
09/01 TO 02/15	ANNUAL RYEGRASS @ 50 LB / ACRE
	WINTER RYE @ 50 LB / ACRE
02/16 TO 04/30	ANNUAL RYEGRASS @ 100 LB / ACRE
05/01 TO 08/31	GERMAN MILLET @ 50 LB / ACRE



(SF) CONSTRUCTION OF A SILT FENCE



(CE) TEMPORARY GRAVEL CONSTRUCTION ENTRANCE



SPECIFIC APPLICATION

This method of inlet protection is applicable where heavy concentrated flows are expected, but not where ponding around the structure might cause excessive inconvenience or damage to adjacent structures and unprotected areas.

* Gravel shall be VDOT #3, #357 or #5 coarse aggregate.

(IP) GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER

CITY OF RKE COMMENTS	CITY OF RKE COMMENTS	APPR. PLANS	description
JWK	JWK	JWK	by
11/17/07	12/19/07	1/7/08	mark date
1	2	3	revisions

date	SEPT. 14, 2007	project	06-0059	designed	JWK	drawn	JWK	checked	FBC
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RRMM ARCHITECTS

COMMONWEALTH OF VIRGINIA
FRANK B. CALDWELL, III
NO. 9184
7-14-08
PROFESSIONAL ENGINEER

project **ROANOKE WILLIAMSON ROAD FIRE STATION**
CITY OF ROANOKE
215 CHURCH AVE SW, ROOM 350, ROANOKE VA 24011
drawing

SITE NOTES AND CONSTRUCTION DETAILS

sheet

C-6

of 7

CWA
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